

### **REMARKS**

Applicants appreciate the notification of allowable subject matter, i.e., that claims 8, 12, and 30 would be allowable if rewritten in independent form, and to overcome any rejections under 35 USC 112.

Claims 1-30 are pending in the application. Claims 1-4 and 13-18 were withdrawn from consideration as being directed to non-elected subject matter. Independent claims 5, 19, and 25 have been amended to further define the step of "patterning the photosensitive resin." Claims 8 and 23 have been amended to overcome the rejections under 35 USC 112, first paragraph. The amendments are fully supported by the application as originally filed.

Claim 8 was rejected under 35 USC 112, first paragraph, "as failing to comply with the enablement requirement." Claim 8 has been amended to replace "inorganic dielectric substrate" with "middle layer," and make claim 8 to depend from claim 6 or 7, in the manner recommended by the Examiner. It is believed that the amendment to claim 8 overcomes the rejection under 35 USC 112, first paragraph.

Claim 23 also was rejected under 35 USC 112, first paragraph. To overcome this rejection, claim 23 has been amended to replace "first micro-lens array" with "first photosensitive resin," as recommended by the Examiner. Withdrawal of the rejection under 35 USC 112, first paragraph is respectfully requested.

As amended, independent claims 5, 19, and 25 each recite that the step of patterning the photosensitive resin is "a step of forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin" by using a beam transmitted through the first micro-lens array (see, e.g., claim 5).

Referring to FIG. 3(c) of the application, for example, a resist layer 42 is irradiated with ultraviolet light through a first micro-lens array 6 to form a three-dimensional structure (see

specification at page 21, lines 1-8). As described on page 21, lines 8-15 of the specification, the resist layer 42 can have any form "by adjusting the intensity distribution of the irradiated light." As shown in FIG. 3(d), the resist layer 42 is shaped into a lens pattern of a "second micro-lens array" (specification at page 21, lines 16-18). Then, referring to FIG. 3(e), the lens pattern engraved on the resist layer 42 is transferred to a silica glass sheet 24 by dry etching (see specification at page 21, lines 20-22).

As stated on page 31, lines 1-5 of the specification, in the above-described production method, "the intensity distribution of exposure light is adjusted so that the exposure is stronger around the center of the optical axes of the respective lenses on the first micro-lens array." In other words, the exposure is targeted to areas near the optical axes of the lenses, which enables lenses to be easily formed into shapes according to the intensity distribution of exposure light (see, e.g., specification at page 32, lines 8-19).

According to the above claimed arrangement, it is possible to carry out patterning of a second micro-lens array (or a three-dimensional structure) by using the first micro-lens array. Therefore, alignment of the optical axes of these two micro-lens arrays is unnecessary. Further, the Applicants' claimed invention can prevent "a lens-pitch misregistration and does not require optical-axis alignment for the two micro-lens arrays" (see specification at page 35, line 20 to page 36, line 3).

Claims 5-7, 9-11, and 19-29 were rejected under 35 USC 102(a) or (b) as being anticipated by "Fabrication method of double micro lens array substrate" to Fujita et al. ("Fujita") or "31a-W-11 Fabrication of double micro lens arrays using a self-alignment exposure method" to Okada et al. ("Okada"). Claims 19 and 25-27 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent 6,594,079 to Trott et al. ("Trott"). These rejections are respectfully traversed.

The Fujita and Okada references are not prior art to the application. The Fujita reference was published on **August 30, 2003**. The Okada reference was published on **October 1, 2003**.

The subject application is an application filed under 35 USC 371 with a filing date of **March 14, 2003** (International Filing Date of PCT International Application No. PCT/JP03/03125). Therefore, the filing date of the application pre-dates the publication dates of the Fujita and Okada references, and these references do not constitute prior art.

Moreover, the Examiner has not satisfied the burden of establishing the publication dates of the Fujita and Okada references. See MPEP 706.02(a): "The examiner must determine the issue or publication date of the reference so that a proper comparison between the application and reference dates can be made." Therefore, the rejection under 35 USC 102(a) or (b) over Fujita or Okada should be withdrawn.

Regarding the rejection of independent claims 5, 19, and 25 over Trott, the Trott reference does not teach or suggest a production method of a micro-lens array substrate or a three-dimensional structure in which a step of patterning a photosensitive resin is carried out by "forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin" as claimed.

Trott is directed to "an image screen having an anti-reflective layer formed using the optical pattern of the screen itself" (column 2, lines 44-46 of Trott).

On pages 5-6, paragraph 5 of the Office Action of 01/24/2007, the "abstract and column 6, line 50 to column 8, line 4" of Trott were cited as allegedly corresponding to the Applicants' claimed invention.

Referring to FIGS. 6-11 of Trott, there is no teaching or suggestion of "forming the photosensitive resin into a required shape by adjusting a distribution of exposure light in the photosensitive resin" as claimed.

For at least the reasons discussed above, the Trott reference does not anticipate or otherwise render obvious the Applicants' claimed invention. Therefore, independent claims 5, 19, and 25 and their respective dependent claims are patentable over Trott.

It is believed that the claims are in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

/Steven M. Jensen/

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Steven M. Jensen  
(Reg. No. 42,693)  
Edwards Angell Palmer & Dodge  
P.O. Box 55874  
Boston, MA 02205

Date: April 24, 2007

Phone: (617) 439-4444

Customer No. 21874